

Application No. 09/738,992

REMARKS

The FINAL Office Action of October 6, 2004 has been carefully considered. Reconsideration of this application, as amended, is respectfully requested. Claims 1-22 are pending in this application. Of these, claims 1, 11, and 12 are independent claims. An Amendment faxed May 24, 2004 amended claims 1-20 and added new claim 21 and 22.

This Amendment amends the specification to eliminate an ambiguous use of the term document used in connection with an object that is stored for each annotation. This ambiguity was also eliminated in claims 4, 7, 15, and 18 by making a corresponding amendment.

In addition, this Amendment amends claims 1 and 11 to correct typographical errors. Further, this Amendment amends the claims to makes clear that the use of the term "document" in claims 1, 4, 7, 11, 12, 15, and 18 concerns a hardcopy document (i.e., digital images of a document).

Applicant respectfully requests these amendments, which are believed to introduce no new matter, to be entered as they place the instant application in better condition for allowance or for appeal.

1. Response to Rejection Under 35 USC 103

The Office Action, on pages 2-11, rejects claims 1-6, 8-17, and 19-22 under 35 USC 103(a) as being unpatentable¹ over Carleton et al., U.S. Patent No. 5,781,727 (hereinafter referred to as "Carleton") in view of Tran, U.S. Patent No. 6,054,994 and further in view of Simonoff, U.S. Patent No. 6,351,777 (hereinafter referred to as "Simonoff"). In addition, the Office Action, on pages 11-12 rejects claims 7 and 18, under 35 USC 103(a) as being unpatentable over Carleton in view of Tran and Simonoff and further in view of Levine et al., U.S. Patent No. 5,680,636 (hereinafter referred to as "Levine"). In rejecting claims 1-22, the Office Action cites: sections of columns 1, 2 of Carleton; sections of columns 2, 7, of Tran; and sections of columns 1, 4, 7, 10, 11, 16, abstract, and Figure 7 of Simonoff.

Applicant's claimed invention is directed at a system that enables users at different locations to work collaboratively on a hardcopy document, and to view each other's annotations to the hardcopy document. The system includes a plurality of

Application No. 09/738,992

workstations communicating with a server. Each workstation comprises a document-imaging device, such as a camera, for generating a digital image of the hardcopy document with handwritten annotations. Handwritten annotations are identified in a captured image of the hardcopy document by image processing. In addition, new or additional annotations to the hardcopy document made by each user can be tracked. Images of the annotations are distributed by the server to each workstation so that each user can selectively view other user's annotations in accordance with the display criteria of the workstation.

In contrast, Carleton describes a system which permits electronic annotations to an application program made by users at remote computers to appear on the displays of other participants. More specifically, Carleton describes a system where an application program can run on a single computer, yet remote participants can issue commands to the program. Further, participants can make annotations on their displays, which are copied by the system onto the displays of other participants. (See Abstract of Carleton.) Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Carleton discloses a system for running an application program on one display where electronic annotations of it may be shared on other displays.

Tran discloses "a graphical data entry system for accepting and processing hand sketches and writings such that the user can quickly specify graphical objects in a drawing on a hand-held, mobile computer with a relatively compact screen". "The graphical data entry system [] can be used in conjunction with a camera to annotate pictures taken with the camera". (See Abstract of Tran.) Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Tran discloses a system where images captured with a camera may then be annotated using a graphical data entry system.

Simonoff discloses "a dedicated White Board system [that facilitates] collaboration between a plurality of users". Objects and hyperlinks and text may be placed and tracked on the white board with tools. (See Simonoff abstract.) A white board applet is run on a client host computer connects with the white board application server (See Simonoff column 10, lines 1-13). A user may draw objects on

Application No. 09/738,992

the white board and share them according to a set of permissions (See Simonoff column 11, line 52 to column 12, line 4). Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Simonoff discloses a system where annotations are shared that are made to an electronic white board.

Levine discloses a system adapted to display an annotated bitmap image of a document. The system has two views, a desk view and an annotation session view. The desk view emulates a user's desk, whereas the annotation view provides screen size document views of a document to be annotated or created using a stylus. (See Levine column 2 line 59 to column 3 line 45.) Unlike Applicant's claimed invention which provides a system that allows users at different locations to collaboratively share annotations made to a hardcopy document, Levine discloses a system where annotations are made using a stylus to a bitmap.

Combining Carlton, Tran, Simonoff, and Levine together, thus fail to disclose or suggest a system as claimed by Applicant in which a plurality of workstations share handwritten annotations made to a hardcopy document by identifying the annotations in a captured image. Instead, Carlton, Tran, Simonoff, and Levine each together or singly concern the annotation of an electronic document; none disclose or suggest the sharing of annotations made to a hardcopy document; for example: Carlton allows participants to create and share annotations to an application program on an electronic display (see Carlton Abstract); Tran permits the annotation of pictures taken with a camera using a graphical data entry system (see Tran Abstract); Simonoff allows users to draw and share objects on an electronic white board (see Simonoff column 11, line 51 to column 12, line 5); and Levine discloses that annotations may superimposed on a bitmap image (see Levine Abstract). To summarize, Applicant respectfully submits that Carlton, Tran, Simonoff, and Levine taken singly or together fail to disclose or suggest as claimed by Applicant, the identification of handwritten annotations in digital images of a document captured using a capture device such as a camera.

Furthermore, Carlton, Tran, Simonoff, and Levine read singly or together, fail to disclose or suggest a system that permits users at a plurality of workstations to selectively view handwritten annotations identified in digital images of a hardcopy document captured at each workstation with a capture device such as a camera, as

Application No. 09/738,992

claimed by Applicant. That is, none of the cited references disclose or suggest a system as claimed by Applicant that allows users at different locations to work collaboratively on a hardcopy document by allowing annotations to a hardcopy document to be viewed at a plurality of workstation displays in accordance with the display criteria of each workstation.

Accordingly, Applicant respectfully submits that independent claims 1, 11, and 12 as amended are patentably distinguishable over Carlton taken singly or in combination with Tran and/or Simonoff and/or Levine. Insofar as claims 2-10 and 13-22 are concerned, these claims depend from one of now presumably allowable independent claims 1 or 12 and are also believed to be in allowable condition.

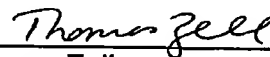
2. Fee Authorization And Extension Of Time

No additional fee is believed to be required for this amendment or response, however, the undersigned Xerox Corporation attorney hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

3. Conclusion

In view of the foregoing remarks, reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is hereby requested to call Attorney for Applicant(s), Thomas Zell.

Respectfully submitted,



Thomas Zell
Attorney for Applicant(s)
Registration No. 37,481
Telephone: 650-812-4282
Date: November 5, 2004